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ABSTRACT

Selectivity is criticized as an index of college quality. Standardized college entrance examination scores can at best reflect college quality, it is proposed. In addition, using them as a measure of college quality assumes, perhaps erroneously, that the college admits only the highest-scoring applicants. Further reasons are these: (1) SAT scores have, on the whole, declined in recent years while college quality probably has not; (2) at many colleges average scores are different for men and women, and this should not be taken to mean that colleges offer different quality education to men and women; (3) selectivity is partly determined by tuition and fees; (4) smaller colleges will necessarily be able to take the highest-scoring applicants, while larger schools have more places to offer lower-scoring applicants; (5) colleges offering special programs do not fit into any traditional pattern; (6) neighborhood, city, region, or climate probably have a significant affect on the applicant pool; and (7) program "innovations", good or bad, affect applicant pools. (MSE)

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A CRITIQUE OF THE IDEA THAT COLLEGE QUALITY CAN BE MEASURED BY UNDERGRADUATE SAT SCORES

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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There are several reasons why selectivity (as measured, usually, by the combined SAT verbal and math scores of entering freshmen) is a popular measure of college quality among educational researchers.

1. Selectivity is very easy to operationalize. If you decide you want to measure "maturity," "happiness," "ability to get the most out of life" or some such thing, you will find these constructs very <u>difficult</u> to operationalize.

2. Not only is selectivity easy to operationalize, but it is easy to <u>measure</u>, which is not quite the same thing. If, for example, you decided to measure "sexual gratification," and you decided to operationalize it as the number of satisfying sexual encounters per month (neglecting, for the sake of argument, all the shortcomings -- no pun intended -- of that as an operational measure), you would find it very difficult to measure this number adequately, having to rely on self-reports and to deal with a large number of distorted responses, refusals to answer, and so on. Once, though, you decide that ability to score high on tests of verbal and mathematical aptitude is something you want to measure, it is at least easy to measure.

3. Selectivity, as measured by entering freshman scores on tests of verbal and math aptitude, is very <u>cheap</u> for the investigator to measure. The data are already abundantly available in the form of SAT scores, ACT scores, NMSQT scores, and such tests, constructed by organizations with much testing experience and practice, have good validity and reliability.

4. To measure quality in any kind of direct way -- instead of by the decidedly indirect way of measuring selectivity -- would require first-hand experience of the colleges on the part of the researchers, and it seems to be the cardinal rule of modern-day education research to have as little as possible first-hand experience with what one is studying. In Plato's famous cave metaphor, the individual in the cave can see only the shadow, not the real object that is casting the shadow, and is consequently deprived of perceiving reality, seeing instead only its reflection. This situation -- seeing not reality, but only a dim reflection of it -- is something that some moder-day researchers in higher education resolutely strive for. They do not choose, in studying the impact that college has on students, to attend the classes that students attend, visit the dorms in which students live, and so on. What they are interested in is getting lots of numbers as a result of mailing out surveys and in statistically analyzing the numbers. Test scores are, of course, ideal for their purposes, since they start out as numbers and don't have to be transmuted into them.

5. Some researchers think that selectivity is a good measure of college quality because it correlates very highly with college "output," as measured, in one researcher's study, by the scores seniors achieved on the Graduate REcord Examination area tests, whereas virtually all measures of college environment showed little or no effect on student achievement once students'

ability at entrance was conrolled for. (A.W. Astin, "Undergraduate Achievement and Institutional 'Excellence,'" in Science, vol. 161, August 16, 1968, pp. 661-668).

6. Finally, and here we refer to the article we have just cited, some researchers have found that such characteristics of the college environment as do seem to be related to student learning seem very implausible. Astin found, for example, that:

> "...the peer environment of those institutions where the students' level of achievement exceeded the level predicted from the freshman input characteristics had generally distinct characteristics: students tended to make frequent use of automobiles, to be undecided about their careers, and to manifest little independence or verbal aggressiveness in the classroom.
>
> (p. 666).

Faced with these results, which seem to be contrary to what common sense would predict -- Princeton, for example, located in the sticks but less than an hour by car from Philadelphia and New York, for many years had a very strict policy prohibiting students from having automobiles on campus, so they would stay around and perhaps learn something -- researchers are understandably tempted to fall back upon the use of SAT scores, which at least have the advantage of correlating highly with student "achievement" and of not appearing ludicrous as predictors of that success.

Still and all, the present writer is less than pleased about the use of "selectivity" as an index of college quality. For one

thing, such scores do not, no matter what anyone says, measure college quality. The best they can hope to do is to indirectly reflect college quality. A college's quality is a composite of a great many things, but some of these are the quality of classroom teaching, the amount of time students spend "learning," in and out of the classroom, and the number and quality of peer interactions in the dorm and around campus. Such things, to be sure, are difficult or impossible to measure precisely, but they -- difficult to measure as they may be -- are the things of which college quality is made up. The best that those who measure quality by selectivity can say is that quality, exceedingly difficult as it is to measure or even define, is somehow "known" by the legions of high school seniors who are applying to college, that the best and brightest of them apply to, are accepted by, and choose to attend the best colleges, and thus that freshman SAT scores reflect college quality.

But the fault in this reasoning is that it, in effect, says that college quality, which is so difficult to measure that higher education researchers who wish to measure it are forced to fall back on selectivity, is at the same time so easy to measure that high school seniors can easily detect it and apply to, be accepted by, and attend the very best schools they can, where their scores can then be measured by the very same researchers who were unable to measure college quality in the first place.

Reeling from this criticism, our principal investigator might say something like this. Selectivity is a good measure of

a college's overall "quality," because by far the most important component of that college's quality is what students learn from their peers, in dorms and fraternities, in the dining halls, and in all the multitudinous peer interactions which make up college life. Therefore, the brighter one's peers, the more one is likely to learn. One spends, after all, only 12-15 hours per week in the classroom, assuming one goes to all one's classes, but much more time than that with one's peers. But the present writer has to objections to this reasoning.

First, I think it vastly overestimates the intellectual content of those peer interactinos. As an undergraduate, this writer attended a selective college, which made all the "highest selectivity" tables of the various college guides, and he had some pretty bright fellow students. His freshman roommate, with whom he spent many hours talking every week, was a Merit Scholar who is now an historian at one of America's most distinguished universities. But this future historian, though he was by no means a jock, preppie, frat-rate, or in any of those other categories which sometimes magically turn intelligent students into, in Veblen's phrase, "genteel dissipators," still and all was a normal college freshman. The result was that for every minute he spent enlightening his dimwitted roommate about, say, the Byzantine hegemony of the Mediterranean region during the 11th century or the importance of the pocket borough in mid-18th century Yorkshire, he spent at least an hour with his primary topic of conversation the secondary sexual characteristics of one Maxine Guberman, a

topic which not only had precious little intellectual content but was one about which he had utterly no first-hand knowledge. And I strongly suspect that in the great majority of conversations, even among bright students at good colleges, the participants are not very much more intellectually inclined than were my former roommate and me.

Another problem with using freshman selectivity as a surrogate for college quality is that it assumes that every college admits, of those who apply, those with the very highest SAT scores. This is a dubious assumption. There are some colleges, of course, that do. One of them was Brandeis in the 1960s, which was almost ideally suited to do so. It was still too new to have many alumni with teenage children, relieving it of the temptation to admit the children of bright parents who -- the children, not the parents -- had all too palpably experienced a Galtonian regression towards the mean. It had only one scholarship-granting intercollegiate sport -- basketball -- a sport which required the services of only a few scholar-athletes a year. It was not faced with the temptation of admitting academically indifferent 4-H club presidents from, say, Grundy County, Iowa, who had broken all the records at the Grundy County Fair for plowing the straightest furrow or growing the biggest rutabagas, because nobody from an environment more rural than the Grand Concourse had ever heard of it. Its applicant pool consisted very largely of bright, test-wise students from good high schools in metropolitan areas, the types of students who were apt to have high test scores, and from this high-scoring group it chose, by

and large, those with the highest test scores.

To compare Brandeis in the 1960s with a school like Yale, that rejected hundreds of applicants with 1300 on the SAT and that chose its share -- or, for a distinguished university, more than its share -- of alumni sons, jocks, preppies, 4-H club presidents, scions of the chancellor of the exchequer of ancient, obscure, cisalpine constitutional monarchies, and the like -- and which consequequently ended up with average freshman SAT scores not very much higher than those of Brandeis, to then infer from that that Yale was not very much more selective than Brandeis, and then to further infer that Brandeis in the 1960s was as "good" as Yale, is simply preposterous.

The present author has criticized "selectivity" as a measure of college quality; let me now give some examples which, in aggregate, show why it is not a good measure of college quality.

1. In the past fifteen years or so, the SAT scores at American colleges and universities as a group -- and in the vast majority of individual colleges and universities -- have sharply declined. But I would venture to say tha the quality of American colleges and universities as a whole has not sharply declined during that period. If we find out, for example, that the "selectivity" of all the colleges that used to be called the Seven Sisters has dropped a sharply since 1965, as indeed it has, would we conclude that the quality of each

of these colleges has greatly declined?

2. At some colleges, one sex scores significantly higher than the other on the SAT. At Vassar, for example, shortly after the school began to admit men, men's SAT scores were far below those of women. Are we to say that Vassar and Tufts offered one level of quality for the men who attended, and a higher level for the women?

3. College selectivity is partly determined by how much it costs to attend an institution. At the service academies today, education is not only free, but students are paid $3600 or more to attend. At Rice, for a long time, students paid absolutely no tuition. It seems very likely that such free (or, in the case of the service academies, stipend-paying) institutions will get more and better applicants, and thus freshmen who score high on the SAT, than expensive schools of equal "quality."

4. Colleges that are very small and have only a very limited number of freshman places will attract higher scoring freshmen than colleges which are equally good or better, but which have more freshman places available. So, for example, the current (eighth) edition of Comparative Guide to American Colleges lists the 35 "most selective" colleges in the entire country, among which are such temples of learning as New College of the University of South Florida, St. John's College (New Mexico), and Webb Institute of Naval Architecture (New York). I hope I will not be considered overly cynical if I conjecture that these distinguished institutions' selectivity is the result not of their hallowed traditions (the two oldest among them, Webb Institute and New College,

were founded in 1960), nor because of their distinguished library holdings (New College, with by far the largest collection, has 100,000 books), nor because they are serendipitously situated in any spot that could even remotely be considered the American Athens (New College is in Sarasota, on the west coast of Florida, St. John's is in Santa Fe, New Mexico, and Webb Institute is in that delightful intellectual community of Glen Cove, New York), nor because of their distinguished faculties (at St. John's, only 3/4 of the faculty has any degree of the bachelor's), nor because of their rich curricular offerings (at Webb Institute, 100% of all the degrees earned by the last senior class were in naval architecture and marine engineering). I would suggest that the main reason why these schools have such high "selectivity" scores is because they are reasonably good and extremely small (the largest, New College, has a freshman class of around 150).

To suggest that these three schools are "better" than less selective UC at SAnta Cruz, UC at Berkeley, U. of Rochester, or Vassar is thus unjustified.

5. WE have discussed colleges which because they are tiny (St. John's New Mexico) or free (Rice for many years) could be much more "selective" than their "quality" would warrant. Webb Institute is both biny and free. Another college which is both tiny and free is redoubtable Deep Springs College, whose address is listed in Cass and Birnbaum's Comparative Guide to Two-Year Colleges and CAreer Programs as "Deep Springs via Dyer, Nevada."

This college is the non plus ultra of the folly of equating selectivity with quality. A two-year college with a booming enrollment of 26 that offers a "program of combined work and study on a cattle ranch in Inyo County," its most recently published SAT scores (716 verbal, 693 math) are higher than those of Harvard, Yale, Princeton, Amherst, Swarthmore, and Pomona, yet one wonders whether it is comparable to those venerable institutions in "quality."

6. Measuring a college's quality by the SAT scores of the freshmen it is able to attract does not take into account that a particular college may be very attractive to students because of the neighborhood, city, region or the climate it is in. It is quite possible that many colleges get substantially better or worse students than they "deserve" because of factors, such as those mentioned just above, that have little or nothing to do with their "quality."

I have often thought, for example, that almost every decent college within 19 miles of Boston -- Brandeis, Tufts, Boston College, Boston University, Simmons, and Emmanuel are examples -- can be more selective than its quality warrants simply because so many people want to go to college in Boston. Conversely, the University of Miami, which is by no means the worst college in the United States, has, due to its location, attracted hordes of the Coppertone crowd who would require five years of intensive tutoring to understand "Sesame Street." If you took the University

of Miami and placed it on Commonwealth Avenue in Boston, ignoring for the moment the practical difficulties in doing this, its students' SAT scores would probably rise 200 points in a year.

7. Equating selectivity with college qualtiy ignores a host of other factors that go into making institutions able to select high quality freshmen. For example, some years ago Brown University, which for a long time had a hard time competing for students against other Ivy League schools, abolished all its general education courses. Almost immediately its applicant pool (and consequently its freshman selectivity) soared. But there is no indication that its "quality" got better as a result of this change. Many would argue that this change made the quality of a Brown education decline.

Similarly, Boston State College, the most sparkling jewel in the diadem that is Roxbury, saw its applicant pool and selectivity plummet in the middle 1960s after the new, much more attractive than Boston State, University of Massachusetts at Boston campus opened a few miles away. Yet there is nothing to indicate that Boston State suddenly got "worse." Indeed, while its "selectivity" was plummetting, it was probably getting "better," so far as its educational resources go, because the state was giving it huge amounts of money in the same push to improve Massachusetts' public higher education that resulted in the University of Massachusetts at Boston campus being opened.

The above examples are only suggestive; dozens more could be cited to make the same point. Clearly, measuring colleges' quality by their freshman SAT scores is an idea whose time has come...and gone.